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NAME OF AUTHOR/*NOM DE L'AUTEUR* William David Ratcliffe

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NAME OF SUPERVISOR/*NOM DU DIRECTEUR DE THÈSE* Dr. Paul Zehart

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DATED/*DATÉ* Aug 15/75 SIGNED/*SIGNÉ* W.D. Ratcliffe

PERMANENT ADDRESS/*RÉSIDENCE FIXÉ* 11143 80 ave
Edmonton, Alberta.

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THE UNIVERSITY OF ALBERTA

MEASUREMENT OF THE SOCIAL NETWORKS OF PSYCHIATRIC PATIENTS AND NORMALS

by

© WILLIAM DAVID RATCLIFFE

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF ARTS

DEPARTMENT OF PSYCHOLOGY

EDMONTON, ALBERTA

FALL, 1975

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "Measurement of the Social Networks of Psychiatric Patients and Normals" submitted by William David Ratcliffe in partial fulfilment of the requirements for the degree of Master of Arts.

.....
Supervisor

.....

.....

Date August 1, 1975

I smile, with anticipation

of patient exploration

of domains yet undetected,

who through touch are themselves affected.

ABSTRACT

The present research was designed to measure and describe characteristics of the social networks of patients and comparable normal control subjects. It was argued that deviant social behavior is a primary determinant of psychiatric hospitalization, and that problems with interpersonal relationships are therefore typical of psychiatric patients. Furthermore, it was argued that the deviant social behaviors of psychiatric patients have social network correlates which serve to discriminate psychiatric patients from normals.

In order to examine differences between the social networks of patients and normals, a questionnaire was designed to elicit information on the number and relationship of individuals which subjects relied upon to meet a variety of interpersonal needs. In addition to these measures a rating was obtained of the degree of satisfaction with personal relationships in the month prior to testing.

Data from normal control subjects revealed that married individuals were more satisfied with their personal relationships than single individuals of the same age. Moreover, they relied heavily upon their spouse as opposed to relatives or friends, to meet a number of interpersonal needs. Single subjects, on the other hand, relied heavily upon relatives and friends, in comparison with either boyfriends or girlfriends. Subjects in both groups typically reported only three or four individuals that they relied upon to meet the interpersonal needs sampled here.

When married and single patients were compared with normals of the

same age, sex and marital status, patients were found to be less satisfied with their personal relationships. In addition, patients showed attenuated reliance on social-sexual relationships. That is, married patients were less reliant upon their spouse than married normals, and single patients were less reliant upon a boyfriend or girlfriend than single normals. In contrast, married and especially single patients showed a greater reliance upon professional helpers in meeting their interpersonal needs. Patient groups did not differ significantly from normals in terms of the overall number of individuals that they reported relying upon.

These findings were interpreted as supportive of the notion that psychiatric patients experience greater difficulty with interpersonal relationships than normals. It was concluded that the present method of measuring the social network is useful in discriminating patients from normals, and that the findings delineated areas which merit further research.

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INTRODUCTION

It is commonly observed that nearly all mental patients exhibit some degree of disturbance in their social behaviors, regardless of their diagnosis (Argyle, 1972). As a result, there is an increasing interest in the social factors involved in all aspects of psychopathology. These areas of interest include etiology, prognosis, the definition and identification of abnormal behavior, the process of hospitalization, and treatment.

With respect to the identification of abnormal behavior and hospitalization, Carson (1969, p.226) has stated, "The criteria defining disordered or abnormal behavior are essentially the products of social custom and convention." It has been argued that failure to meet the social expectations of others in ways typically labelled as "abnormal," "crazy" or "sick," frequently results in hospitalization (Scheffe, 1966; Szasz, 1961). An extreme example of this is involuntary admissions to a psychiatric hospital. On a less formal level, friends or relatives may persuade an individual to seek treatment when his deviant behavior is viewed as a danger to himself or when it can no longer be tolerated by others.

On the other hand, a person may voluntarily seek treatment due to his own dissatisfaction with personal situations. In one study, interpersonal problems constitute the largest proportion of the presenting complaints of psychiatric patients (Battle, Imber, Hohn-Saric, Stone, Nash, & Frank, 1966). In summary, the individual's own reaction to his interpersonal relations or the reactions of others to the individual's social behaviors, form a large part of the criteria which result in obtaining psychiatric treatment.

When the individual's observed social behaviors differ from expectations or desires of either the individual himself or others, they may be described as deviant in some respect. Persistent patterns of deviant behavior are likely to be viewed as manifestations of the individual's personality. Personality refers to the relatively stable characteristics of the individual, his behavior repertoire, attitudes and traits, which serve to distinguish him from others (Carson, 1969).

The individual's personality characteristics reflect his constitutional make-up and his previous environmental experiences. With respect to deviant social behavior, patients may be viewed as lacking the appropriate interpersonal skills and attitudes as a result of maladaptive learning experiences, or as exhibiting disrupted social behavior as a result of a genetic abnormality or a physiological disfunction. The present study focuses attention on the environmental factors associated with psychopathology, with particular emphasis on the social environment.

It is generally maintained that early interpersonal experiences within the family play an important role in the development of personality (Goslin, 1969; Parke, 1969; Carson, 1969; Bandura & Walters, 1963). Parents provide models, conditioning, and instruction regarding modes of behavior, and attitudes towards oneself and others. To the extent that this training is congruent with the norms of their society, parents act as normalizing agents in the socialization of their child. To the extent that this training is incongruent with the norms of their culture, or inadequate, inconsistent, or even contradictory, it may be considered productive of subsequent deviant behavior (Millon, 1969).

It is important to note that the learning of social skills and the

development of personality require interactions with others. Typically, the social agents involved in this learning process vary as a function of age. While parents or guardians are initially the most influential agents, siblings, other relatives, neighbors, teachers, and peers exert increasing social influence over the individual as he matures. For the purposes of the present study, those persons who are thought to exert the greatest influence over the individual at any given point in time are referred to as members of the individual's social network, or simply as the individual's social network.

Social Network as an Independent Variable

Since interpersonal experiences are viewed as determinants of subsequent personality development, and the nature of those experiences depend upon the characteristics of the individual's social network, it follows that the social network is an important determinant of subsequent personality development. Acquiring adaptive social skills presupposes a social network which contains the appropriate models, and reinforces the performance of such adaptive skills. To the extent that the social network fails to provide such training it is assumed to be productive of deviant behavior.

While consideration of the agents involved in the development, amintenance and change of deviant behavior may seem one step removed from an examination of the social mechanisms involved in psychopathology, it is on this sociological level that professional helpers are introduced to the social networks of psychiatric patients. Professional helpers are thought to be normalizing agents instrumental in the patient's

subsequent development. Strupp, Fox and Lessler (1969, p.133) argued that "the relationship with the therapist provides a model for dealing with other people." After all, the relationship between a patient and a professional helper is merely a special instance of relationships in general (Bergin & Strupp, 1972; Rogers, 1961). This idea is not new. Schofield (1964) characterized psychotherapy as the purchase of friendship.

A second way in which the individual's social network may be altered for therapeutic purposes, is through the use of group therapy involving other patients. As a mode of treatment, group therapy stands in recognition of the importance of the social behaviors of patients. Within groups, therapists attempt to create a milieu conducive to the acquisition of adaptive social skills. In establishing a group, however, the individual's social network is altered through contact with other patients.

Recognition of the importance of the patient's naturalistic social network in terms of his subsequent personality development is implicit in therapies which include significant others in treatment. Family therapy and, more recently, network therapy stand as examples of such treatment. Network therapy (Speck & Attneave, 1973) is a form of group therapy which simultaneously involves all of the members of the patient's social network who are thought to nave some bearing on the patient's behavior. In network therapy it is assumed that the members of the patient's social network have been instrumental in development of the patient's deviant behavior and that they also have the resources needed to resolve the patient's problem. During such treatment it is not

uncommon that suggestions are made to change the social network of the patient by reducing the amount of contact with some members and increasing the interaction with others.

Implicit in these modes of treatment is the notion that the social network of the patient must be altered in an attempt to normalize his subsequent behavior. Surprisingly enough, little systematic research has been directed at assessing the social networks of patients.

Social Network as a Dependent Variable

In the previous section the focus of attention was on the effects or potential effects of the social network on the subsequent characteristics of the individual. However, the individual is also instrumental in shaping his social network. Here again this can be expected to vary with age. Initially the individual has little effect on who it is that he interacts with. His initial social network consists primarily of his parents or guardians, and persons in close spatial contiguity.

However, his personal characteristics become increasingly important with age. If his early social experiences or his particular organic make-up render him socially deviant, his characteristics will affect his social network. His interpersonal skills may be such that he finds it difficult to acquire and maintain friendships. He may therefore rely more upon relatives. Here again his interpersonal behavior may be such as to strain even these less voluntary relationships. On the other hand, his particular personality pattern may simply be influential in attracting others who compliment his interpersonal style. If his interpersonal style is socially deviant it is unlikely that those who

voluntarily interact with him will have a normalizing effect on his subsequent behavior.

Since deviant social behavior is a major determinant of hospitalization, and such behavior is thought to affect characteristics of the individual's social network, it would seem reasonable to expect differences between the social networks of psychiatric patients and the social networks of normals. It is the aim of the present research to explore such differences. Information about the social networks of patients is potentially useful in determining the areas in which patients have problems with interpersonal relations. This, in turn, has implications for treatment and may also suggest suitable outcome measures. Before proceeding with the statement of specific hypotheses concerning the social networks of psychiatric patients and normals a number of matters need clarification.

Measurement of the Social Network

The term social network has been borrowed from the British Anthropology literature. Its first use has been attributed to Radcliffe-Brown (1940). While the term has been used in a variety of ways (Bott, 1971) it generally refers to a group of individuals linked with one another in some manner through personal contacts.

The present use of the term appears most closely related to what has been called a "personal" or "ego-centric" network (Mitchell, 1969). That is, the social network includes those individuals (collaterals) who bear some relationship to a subject. For example, they could be a friend, a parent or a boyfriend of the subject.

Social networks may vary on a number of dimensions. They may vary in terms of size; the number of collaterals who make up the social network, composition; in terms of relationships such as relative or friend, or in terms of the quality of the relationships. Furthermore, they may vary in terms of their normalizing or deviance productive effects on the individual.

Obviously the most complete description of a subject's social network would involve cataloguing all those persons which the subject interacted with in some way; determining the characteristics of each of these collaterals; and establishing the exact relationship with, and the amount of influence that each collateral exerted on the subject. While potentially valuable such a task is formidable. Total "personal" networks typically include up to 100 or more individuals (Speck & Attneave, 1973; Moreno, 1953). The task of assessing each collateral would be time consuming indeed.

One strategy which has been adopted is to focus on either the parental or conjugal family (see Jacob, 1975, and Cragoe, 1972, for respective reviews). However, the social environments of adults typically include friends, neighbors and co-workers in addition to relatives. Any number of these relationships may have a bearing on the patient's particular problem and therefore deserve attention (Kanfer & Saslow, 1965). However, to date systematic analysis of this larger social context as it relates to psychopathology has been sparse indeed.

As a consequence it was decided to allow the subject to indicate who he perceived to be most important to him, by asking the subject to indicate who he relies upon to meet a small set of interpersonal needs.

The needs sampled here include companionship, feelings of closeness, having someone to confide in when troubled, having models to guide one's behavior, understanding, feeling cared for, advice about how to live and social support. The assessment of these needs took the form of the following questions:

1. Who do you spend most of your free time with?
2. Who do you feel the closest to?
3. When you feel unhappy or confused, who do you talk to?
4. Of the people you know personally, who do you wish you were most like?
5. Who knows the most about you?
6. Who cares the most about you?
7. Whose advice about how to live is most important to you?
8. Who would stand by you through almost anything?

(The instructions and scoring have been described in the general method section of Study I.)

Marital Status

Two studies have suggested that social networks differ as a function of marital status in ways that are importantly related to psychopathology. Rushing (1971) reported that married patients showed the lowest ratio of involuntary (court referred) to voluntary admissions and single patients the highest. Separated and divorced patients showed an intermediate ratio. He interpreted this finding in terms of the social

networks of patients. He maintained that married persons have a greater number of individuals upon which they can rely for help, when faced with pressures for their commitment by social agencies or authorities. This additional support is thought to spring from the individual's spouse, children and in-laws.

Second, Strupp, Fox, and Lessler (1969) noted that married patients appeared to improve more from psychotherapy than single patients. They attributed this to characteristics of the husband and wife relationship, thought to be unique to marriage.

In addition to these two studies, the most casual observations of adult social behavior leaves one with the impression that marriage drastically alters the patterns of social interactions. Individuals become economically, legally and emotionally reliant upon their spouse. For these reasons, it was decided to compare patients and normals within marital status categories. Only single and married subjects were used in these analyses due to sampling limitations.

Experimental Design

As a result four sets of comparisons were made. Each set of comparisons constituted a study. The first dealt with married and single normals, the second dealt with married patients and married normals, the third dealt with single patients and single normals, and the fourth dealt with married and single patients. As indicated earlier, the composition of the social network is expected to vary as a function of age. Furthermore, marriage is age related. It was therefore important to control for age when comparing between marital status categories and

between patients and normals.

Before specific hypotheses regarding the differences between the social networks of patients and normals could be clearly stated and comparisons made, baseline data had to be obtained on normal subjects divided according to marital status. This was deemed necessary since, to the author's knowledge, there had been no previous attempts to measure and describe social networks in the manner outlined here. As a result, hypotheses were stated following the first study.

STUDY I

General Method

Subject Pool

The present research was attached to a larger, on-going project designed to collect pre-treatment data from representative samples of patients admitted to full and partial psychiatric hospitalization facilities. Data were also collected from a sample of non-patients who served as normal control subjects. Samples used in the present study were drawn from these larger samples in order to control for marital status and age.

Partially Hospitalized Patients. All of the 91 patients admitted to the Day Hospital Edmonton between May 13 and September 25, 1974 constituted this sample.

Fully Hospitalized Patients. Between the same period of May 13 and September 25, 1974, four groups of approximately 24 consecutively admitted patients were sampled at approximately one month intervals from patients admitted to Alberta Hospital Edmonton. Forensic patients were excluded. The obtained sample of 103 patients represented approximately 16% of all non-forensic patients admitted during that time period.

Patient samples were pooled in the present study for purposes of comparison with normal control subjects, in order to increase sample sizes and include a broad cross-section of psychiatric patients.

Normal Controls. Normal control subjects were drawn from residents of the City of Edmonton living in socioeconomic areas comparable to

Day Hospital Edmonton patients. Between May 13 and September 25, 1974, 81 normal control subjects volunteered to participate. This represented approximately 12% of those persons contacted through door-to-door canvassing.

Questionnaire and Scoring

When interviewed as part of the larger project, subjects were also asked to fill out the Social Information Form. As indicated early the core of this questionnaire contained a set of eight questions (see Social Information Form, Appendix A). Subjects were asked to respond to these questions by giving the names of up to three adults (16 years of age or older) who they knew personally and who they relied upon to meet the needs implicit in each question. Subjects were instructed not to treat groups of people, such as "parents", as a unit, but refer to only one individual per response (see Appendix B for Instructions). This meant that up to 24 different individuals could potentially be reported by each subject. Entries such as "myself" or "God" were not scored as legitimate responses.

Dependent measures derived from this portion of the questionnaire included the overall number of different individuals reported in answering all eight questions, and the number of individuals given per question. In addition, collaterals were given scores according to the order in which they appeared following each question. Subjects were instructed to report their choices in order of importance under each question. Therefore, collaterals chosen first were given a score of three, collaterals chosen second were given a score of two, and

collaterals chosen third were given a score of one. Summing across questions gave each collateral an overall score thought to reflect the degree of reliance of the subject upon each particular collateral. These scores could range from a low reliance of 1, up to a high reliance of 24. In the latter case the collateral would have been reported as the first choice under each question.

Subjects were then asked to report their degree of satisfaction with their personal relationships in the month prior to testing on a 4-point scale. For purposes of analysis the scale was reversed from that shown in Appendix A, such that 4 stood for very satisfied and 1 stood for very dissatisfied.

Finally, subjects were asked to indicate their relationship with each collateral. These relationships were grouped into four categories: (1) relatives, (2) friends, (3) affective partners, (4) professional helpers. "Professional helper" included all professionals in the mental health field as well as family doctors. "Affective partner" referred to either a spouse, or boyfriend or girlfriend. "Friend" included neighbors and co-workers. The "relative" category included parents, siblings, children and all other hereditary and legal relatives excluding one's spouse.

In order to determine the relative amount of reliance upon members of these four relationship categories, reliance scores were summed across individuals in each category. This procedure was applied to responses to each of the eight questions as well as to the sum across all questions. For example, if under question one a subject reported a friend first, his wife second, and another friend third, the reliance

scores were four for the "friend" category and two for the "affective partner" category.

In summary then, the Social Information Form yielded information about the perceived size and composition of social networks, recent satisfaction with personal relationships, and the patterns of reliance upon others in meeting a variety of interpersonal needs.

Statistical Analysis

When comparisons were made between more than two means the a posteriori Tukey (a) (.05 level) procedure was used to establish significant differences. It was assumed to be sufficiently conservative for the number of statistical tests used in this study.

Method

Procedure

For this study 18 single and 13 married normal subjects between the ages of 22 and 32 were drawn from the non-patient control sample. Married subjects were married for the first time. Single subjects had never been married and were not living common-law at the time of this study.

Results and Discussion

These two groups did not differ significantly in age. The mean ages were 24 years for single subjects and 27 years for married subjects ($t=1.28$; $df=29$; $p<.21$). However, these groups did differ significantly in terms of sex. While 39% of the single subjects were female, 85% of

the married subjects were female (x^2=4.73; df=1; p<.03). Sampling limitations prevented controlling for this variable. However, it should be noted that this interaction between sex and marital status is typical of psychiatric patients in general (Gove, 1972) and of the patient samples used in this study. That is, single males and married females are more common in psychiatric populations than single females and married males.

Missing Data

Two subjects in the single group failed to complete the Social Information Form, leaving 16 single subjects and 13 married subjects. These missing data did not appreciably affect the age and sex characteristics of the single sample.

Treatment History

Few of the subjects in either group had ever received psychiatric treatment; 13% of the single subjects and 8% of the married subjects. Furthermore, these groups did not differ significantly on this measure (x^2=.02; df=1; p<.900).

Satisfaction

Married normals were significantly more satisfied with their personal relationships in the month prior to testing than were subjects who had never been married, but were of similar age. Married subjects obtained a mean score of 3.85 on a four-point scale while single subjects received a mean score of 2.94 (t=3.56; df=27; p<.002). No married subjects in this sample reported being less than "often satisfied" and

no single subjects reported being "very dissatisfied" with their personal relationships prior to testing. This finding was unexpected. It would appear that for normal subjects marriage offers greater fulfilment of interpersonal needs than remaining single.

Number of Collaterals

There was no significant difference between these two marital status groups on the overall number of collaterals reported although there was a tendency for single subjects to report more collaterals than married subjects (means of 4.25 and 3.08, respectively; $t=1.63$; $df=27$; $p<.111$). The number of collaterals ranged from 2 to 9 for single subjects and from 1 to 6 for married subjects.

These groups did not differ significantly on the number of collaterals reported on each question (see Appendix C1 for means and statistical tests). However, applying a repeated measures design across questions within groups yielded significant differences between the number of collaterals reported per question for married ($F=7.17$; $df=7/84$; $p<.001$) and single subjects ($F=3.39$; $df=7/105$; $p<.005$). That is, subjects varied in the number of collaterals they relied upon to meet specific needs.

Within the married sample a Tukey (a) (.05 level) a posteriori test between means revealed that the number of collaterals reported as models to guide one's behavior (Question 4) was significantly less than the number reported for all other questions except question seven. Question seven, advice about how to live, attracted significantly fewer responses than questions five and eight. A similar although less pronounced

pattern was observed in single subjects.

In summary, both groups reported or tended to report fewer individuals who served as models for their behavior or provided advice about how to live, in comparison with other needs. Given the generally high level of satisfaction with their personal relationships for both groups of subjects, it would seem reasonable to conclude that normals felt little need to emulate the behavior of others. That is, being generally satisfied with their interpersonal interactions they felt little need for models to guide their social behavior or for advice about how to live. This interpretation is strengthened by the fact that this effect was most pronounced in the group which also obtained the highest satisfaction scores; married normals.

These findings concerning the number of collaterals reported, appear contradictory to the assumptions made by Rushing (1971). He suggested that married persons had a greater number of individuals who they could rely on in times of need. However, if questions 8, 2 and 6 can be taken as a measure of the extent to which subjects have others that they can rely upon in times of need, no support was found for Rushing's assumption. In the present study married and single individuals did not differ significantly in terms of the number of collaterals they reported would stand by them through almost anything, who they could talk to when troubled, or who they thought cared about them (Questions 8, 2, and 6, respectively). However, the present measure of social network illicits only a small subset of the total "personal" network which the subject could potentially draw from as the need arises. Thus, these findings provide only a partial test of

Rushing's assumption.

Reliance on Relationship Categories

No subjects in either sample reported relying on professional helpers for the interpersonal needs sampled here. This is hardly surprising since few of these normal subjects had received treatment for psychological problems; the event which typically brings individuals in contact with professional helpers.

Single subjects were significantly more reliant upon their relatives and friends than were married subjects (see Table 1). In contrast, married subjects were significantly more reliant upon their spouse than single subjects were upon their affective partner. Furthermore, married subjects relied more upon their spouse than either their relatives or their friends ($F=41.67$; $df=2/24$; $p<.001$) and single subjects relied more upon both their relatives and their friends than upon their boyfriend or girlfriend ($F=5.44$; $df=2/30$; $p<.010$).

It could be argued that the differences observed in the single sample were due to the large number of individuals included in the relative and friend categories in comparison with the affective partner category, and not due to larger reliance scores for single individuals in those categories. However, married subjects showed twice the amount of reliance upon their spouse in comparison with their relative and friend categories combined. In other words, married normals rely heavily upon their spouse in comparison with all other individuals.

In order to determine who subjects relied upon to meet the specific needs sampled in this study, reliance scores were compared on each

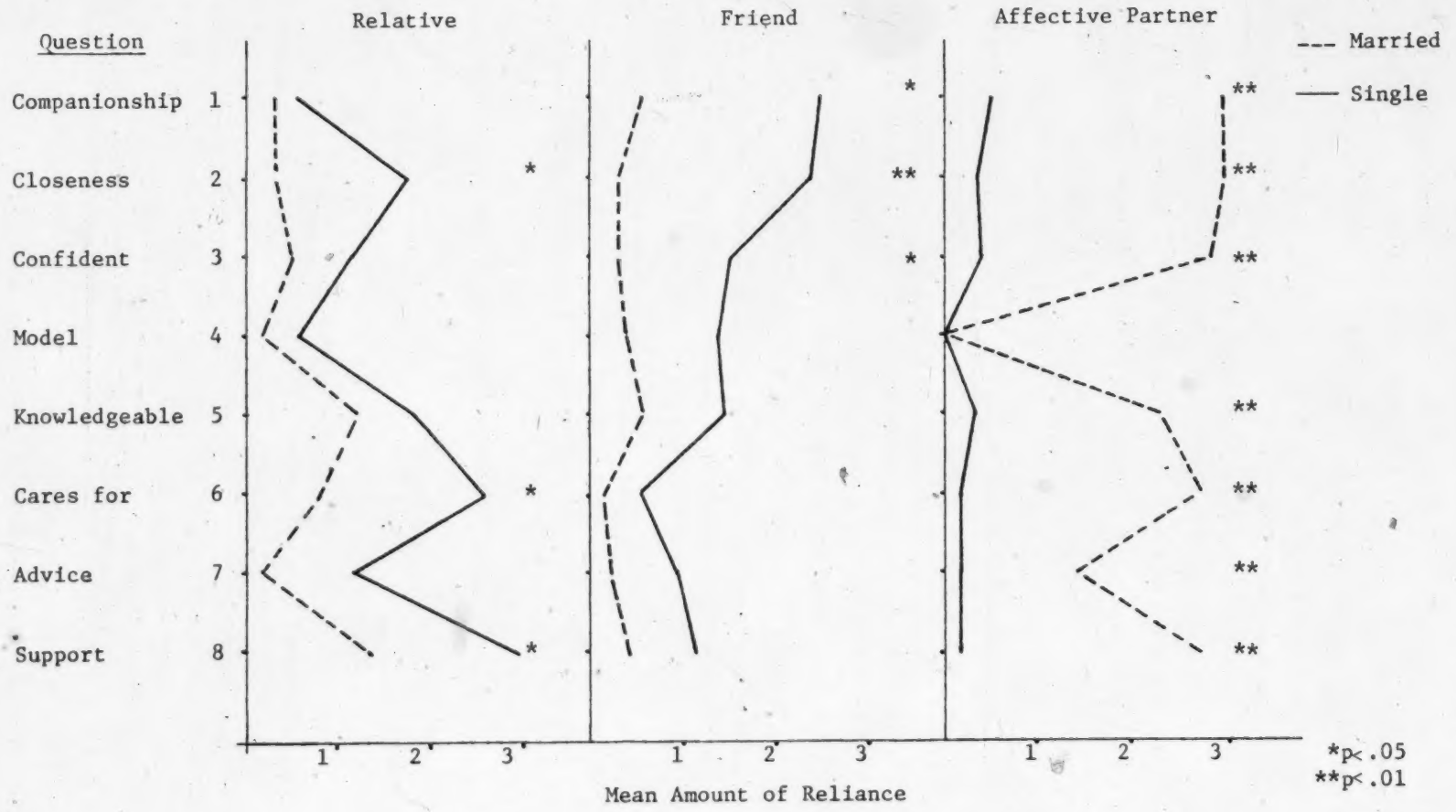
TABLE 1

MEAN RELIANCE ON RELATIONSHIP CATEGORIES FOR MARRIED AND SINGLE NORMALS

	Single	Married	t	df	p<
Relative	12.63	5.15	2.24	27	.033
Friend	11.69	3.08	3.04	27	.005
Affective Partner	2.13	18.15	8.75	27	.001
Professional Helper	0.00	0.00			

FIGURE 1

AMOUNT OF RELIANCE WITHIN RELATIONSHIP CATEGORIES FOR MARRIED AND SINGLE NORMALS



question. Figure 1 reveals that the general pattern of greater reliance upon relatives and friends by single subjects when compared with married subjects, was apparent across questions. More specifically, single subjects were significantly more reliant upon relatives than married subjects for feelings of closeness, feeling cared for and for social support (Questions 2, $t=2.24$; $df=27$; $p<.034$; 6, $t=3.01$; $df=27$; $p<.022$; and 8, $t=2.36$; $df=27$; $p<.026$, respectively; see Appendix C2 for further documentation). Furthermore, single subjects were significantly more reliant upon their friends than married subjects for companionship, feelings of closeness, and for someone to confide in when troubled (Questions 1, $t=2.34$; $df=27$; $p<.027$; 2, $t=3.33$; $df=27$; $p<.003$; and 3, $t=2.45$; $df=27$; $p<.021$, respectively; see Appendix C3 for further documentation). On the other hand, married subjects were significantly more reliant upon their spouse than single subjects were upon their affective partner for all of the interpersonal needs assessed here, with the exception of question four. In this case, neither group wished to be like their affective partner (see Table 2).

Given that there were no significant differences between groups on their overall reliance scores per question (see Appendix C4) it would appear that a trade-off relationship existed between reliance upon a spouse and reliance upon either relatives or friends or both. That is, a spouse might be called upon to fulfil needs that might otherwise be met by relatives or friends. When comparisons were made between relationship categories within the married and single samples support was obtained for this argument (see Figure 2 for a graphic representation). Married subjects relied significantly more upon their spouse than either their relatives or friends for all needs except for models to guide

TABLE 2

MEAN RELIANCE ON AFFECTIVE PARTNER CATEGORY OF RELATIONSHIPS

FOR MARRIED AND SINGLE NORMALS

Question	Single	Married	t	df	p<
1	.50	3.00	8.20	27	.001
2	.38	3.00	9.20	27	.001
3	.38	2.85	8.23	27	.001
4	.0	.0			
5	.31	2.31	4.89	27	.001
6	.19	2.77	8.78	27	.001
7	.19	1.46	3.06	27	.005
8	.19	2.77	8.78	27	.001

FIGURE 2

AMOUNT OF RELIANCE ON CATEGORIES OF RELATIONSHIPS

FOR MARRIED AND SINGLE NORMALS

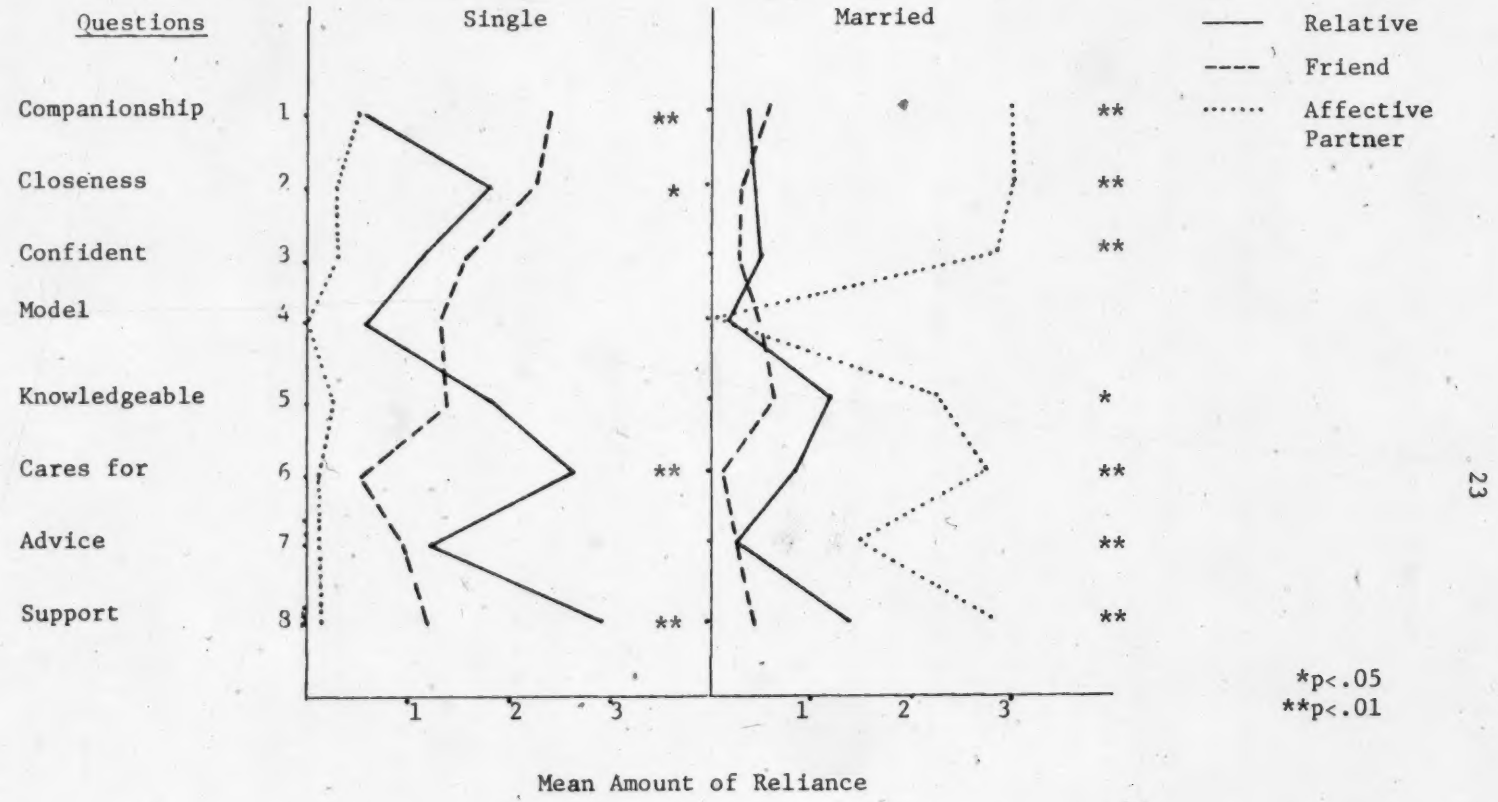


TABLE 3

MEAN RELIANCE ON CATEGORIES OF RELATIONSHIPS

FOR MARRIED NORMALS

Question	Relative	Friend	Affective Partner	F	df	p<
1	.31	.62	3.00	71.03	2/24	.001
2	.38	.31	3.00	82.14	2/24	.001
3	.54	.31	2.85	27.00	2/24	.001
4	.23	.46	.0			
5	1.23	.62	2.31	4.50	2/24	.050
6	.84	.15	2.77	26.54	2/24	.001
7	.23	.23	1.46	6.01	2/24	.010
8	1.38	.38	2.77	12.64	2/24	.001

behavior and for understanding (Questions 4 and 5, respectively; see Table 3). No significant difference between relationship categories was obtained on question four. On question five a posteriori tests revealed that while married subjects were more reliant upon their spouse than friends for understanding neither category was significantly different from relatives. Furthermore, while married subjects were more reliant upon their spouse than relatives for social support, they were also more reliant upon relatives than friends for social support (Question 8).

Single subjects showed significant differences in the amount of reliance upon relationship categories on questions one, two, six and eight (see Table 4). A posteriori tests revealed that single subjects relied more upon friends than upon either relatives or an affective partner for companionship (Question 1), more upon friends than upon affective partners for feelings of closeness (Question 2), and more upon relatives than upon friends or affective partners for feeling cared for and for social support (Questions 6 and 8, respectively).

It is generally maintained that the basic properties of kinship are positive concern and obligation while the basic properties of friendship are consensus and shared interests (Adams, 1967). Adams has argued that individuals seek out the companionship of friends as opposed to relatives because of the consensual aspects of such relationships and because of the lack of obligation. This notion was confirmed with single subjects when question 1, "Who do you spend most of your free time with?" was examined. Reliance upon friends, even with the exclusion of boyfriends and girlfriends, was significantly greater than

TABLE 4

MEAN RELIANCE ON CATEGORIES OF RELATIONSHIPS

FOR SINGLE NORMALS

Question	Relative	Friend	Affective Partner	F	df	p<
1	.56	2.44	.50	5.39	2/30	.010
2	1.75	2.31	.38	3.70	2/30	.050
3	1.13	1.56	.38	1.94	2/30	.250
4	.63	1.31	.0			
5	1.81	1.44	.31	2.39	2/30	.250
6	2.63	.56	.19	9.10	2/30	.001
7	1.19	.94	.19	1.50	2/30	.250
8	2.94	1.13	.19	8.84	2/30	.005

reliance upon relatives on this question. However, married subjects relied most exclusively upon their spouse for companionship.

Taking question 8, "Who would stand by you through almost anything?" as an indication of positive concern and obligation, greater reliance upon relatives than upon friends would be expected on the basis of Adam's paper. Here again this notion was confirmed with single subjects. While it was also true that married subjects relied more upon their relatives for social support than upon their friends, they also relied more upon their spouse than upon all other relatives combined. Thus the relationship with a spouse is quite unique. It has both the characteristics of kinship and friendship.

Summary

Married normals were more satisfied with their personal relationships in the month prior to testing than single normals of the same age. These groups did not differ in the number of collaterals in their perceived social networks nor in the number of collaterals relied upon to meet each of a variety of interpersonal needs. Both groups reported fewer individuals who served as models for their behavior or provided advice about how to live in comparison with other needs. This effect was most pronounced in the married sample.

Married subjects relied heavily upon their spouse to meet a variety of interpersonal needs. Single normals, on the other hand, relied primarily upon both relatives and friends to meet the same set of needs. These patterns of reliance varied somewhat depending upon the specific interpersonal need.

Hypotheses

With this baseline data, it is now possible to state hypotheses regarding differences between the social networks of patients and normals. It has been argued that one of the main factors contributing to hospitalization is problems in the social domain. To the extent that problems with interpersonal relationships are typical of psychiatric admissions, regardless of their specific diagnosis, it would seem reasonable to expect patients to be less satisfied with their personal relationships than normals. Their inadequate relationships with others would reduce the chances of meeting their interpersonal needs and thereby reduce their satisfaction. As a result it was hypothesized that both married and single patients are less satisfied with their personal relationships than normals.

Second, if patients lack the social skills required for competent adult behavior, they are likely to have more difficulty in attracting and maintaining friendships. If this is the case patients are not expected to report as many friends that they can rely on for a variety of interpersonal needs as normals. It is a commonly held belief that at the time of hospitalization patients typically have few friends (Thompson & Van Houten, 1970).

This lack of interpersonal skills would not be expected to have the same effect on involuntary, kinship, relations. Due to the obligatory and mutual aid characteristic of kinship (Adams, 1967) patients could continue to rely upon relatives even when their behavior strained such relationships. Furthermore, if patients rely less on friends in order to meet interpersonal needs they may be forced to rely even more on

relatives than normals in order to meet such needs.

Speculations regarding the relative amount of reliance upon friends and relatives seem most appropriate for single subjects, since reliance upon one's spouse far outweighed reliance upon either friends or relatives for married subjects. Assuming that problems with relationships affect the personal attractiveness of single patients it was hypothesized that they are less reliant upon friends and affective partners in comparison with normals. On the other hand, it was hypothesized that single patients rely more upon their relatives than normals.

The situation is less clear for married patients since their relationship with their spouse has both kinship and friendship characteristics. After reviewing studies of pathology in marriage, Crago (1972, p.125) has concluded:

> When mental disorders do occur among the married, both partners are likely to manifest some degree of disturbance. The spouse is affected not only by the partner's disorder but also by the partner's treatment and hospitalization.

If this is the case, the married patient may be less able to rely upon his or her spouse due to the stresses and strains on their relationship which produced or resulted from the patient's disorder. Furthermore, hospitalization may be symptomatic of an impending divorce or separation in which case the patient may be involved in the process of disengaging himself from his spouse. It was therefore hypothesized that married patients are less reliant upon their spouse than normals.

As indicated earlier, treatment brings the individual in contact with professional helpers who attempt to act as normalizing agents in terms of the individual's subsequent development. It is quite possible

to enjoy a therapeutic or normalizing relationship with a non-professional member of one's social network. Indeed, many disorders may be ammeliorated by such non-professional relationships (Bergin, 1963). However, hospitalization typically indicates that the individual's social network is viewed, by the individual himself, or by its members, as deficient of non-professionals who can play the necessary therapeutic role. Thus, the development of reliance upon a professional helper would not be surprising. Should this occur, the professional helper would become an important member of the patient's social network.

This assumes, of course, that patients have had some exposure to professional helpers; that is, they have received treatment prior to their present admission. To the extent that a large proportion of patients have a history of treatment it was hypothesized that both married and single patients are more reliant upon professional helpers than normals.

In summary, when comparing patients and normals controlling for age, sex, and marital status, the hypotheses were as follows:

1. both married and single patients are less satisfied with their personal relationship than normals,
2. single patients are less reliant upon voluntary relationships (friends, boyfriends, and girlfriends) than normals,
3. single patients are more reliant upon relatives than normals,
4. married patients are less reliant upon their spouse than normals,

5. and both married and single patients are more reliant upon professional helpers than normals.

It is important to bear in mind that in addition to testing these hypotheses it was the general aim of this research to describe in some detail the similarities and differences between the social networks of patients and normals. As a result a number of comparisons have been included for which no hypotheses have been presented.

STUDY II

Method

Procedure

Thirty-one patients and 26 normals who were married for the first time and were between the ages of 20 and 50, were drawn from the subject pool. Within the patient sample 18 subjects were admissions to Alberta Hospital Edmonton and 13 subjects were admissions to Day Hospital Edmonton. The normal sample included the 13 subjects used in Study I. Scoring and data analyses were identical with those used in the first study.

Results and Discussion

Married patients and normals did not differ significantly in age or sex. While the patient sample had a mean age of 35 years the normals had a mean age of 33 years ($t=.80$; $df=55$; $p<.431$). Females made up 65% of the patient sample and 77% of normal sample ($x^2=.53$; $df=1$; $p<.466$).

Missing Data

Six of the 31 married patients and none of the 26 normals failed to complete the Social Information form. The missing data in the patient sample did not appreciably affect the age and sex characteristics of that sample.

Treatment History

Approximately three-quarters of the patient sample had been treated for a psychological disorder prior to the present admission. In comparison only 4% of the married normals had been treated for a psychological disorder. The difference was significant (x^2=21.49; df=1; p<.001).

Satisfaction

As predicted married patients were significantly less satisfied with their personal relationships in the month prior to testing than were married normals of a similar age and sex. On the 4-point satisfaction scale normals obtained a mean score of 3.54 while patients obtained a score of 2.54 (t=3.94; df=48; p<.001).

Number of Collaterals

There was no significant difference between married patients and normals on the number of collaterals reported (means of 3.24 and 2.81, respectively; t=1.08; df=49; p<.287). The number of collaterals ranged from 1 to 6 for married patients and 1 to 7 for normals. Professional helpers made up a mean of 6% of patients' collaterals and only 1% of normals' collaterals. This difference was significant (t=2.12; df=49; p<.019).

Turning to the individual questions, married patients reported a significantly larger number of collaterals who served as models for their behavior than normals (Question 4, t=2.18; df=49; p<.034). This would seem to indicate that patients were less satisfied with their own

social behavior and wished that they could be more like others. On the other hand, they tended to report fewer collaterals who were thought to be knowledgeable about them and fewer collaterals who they relied upon for social support (Question 5, $t=1.94$; $df=49$; $p<.055$, and 8, $t=1.73$; $df=49$; $p<.089$, respectively; see Appendix C5 for further documentation).

Reliance on Relationship Categories

Overall reliance scores for married patients were similar to those of normals with some important exceptions. While these groups did not differ significantly in their reliance upon relatives and friends, patients relied significantly less upon their spouse than normals (see Table 5) as was predicted.

Closer examination revealed that 16% of the married patients did not report relying on their spouse for any of the interpersonal needs sampled in this study. In contrast all of the married normals reported their spouse. It would appear that these patients had functionally ceased to be married, even though they reported themselves as married rather than as separated or divorced, which was their option. These particular patients however did not totally account for the difference between groups in the amount of reliance upon their spouse. The remaining patients still relied significantly less upon their spouse than normals (means of 13.05; and 16.54, respectively; $t=2.10$; $df=34$; $p<.041$).

As predicted, married patients relied significantly more upon professional helpers than married normals (see Table 5). This is not surprising given the differences between these two groups in terms of their treatment histories.

TABLE 5

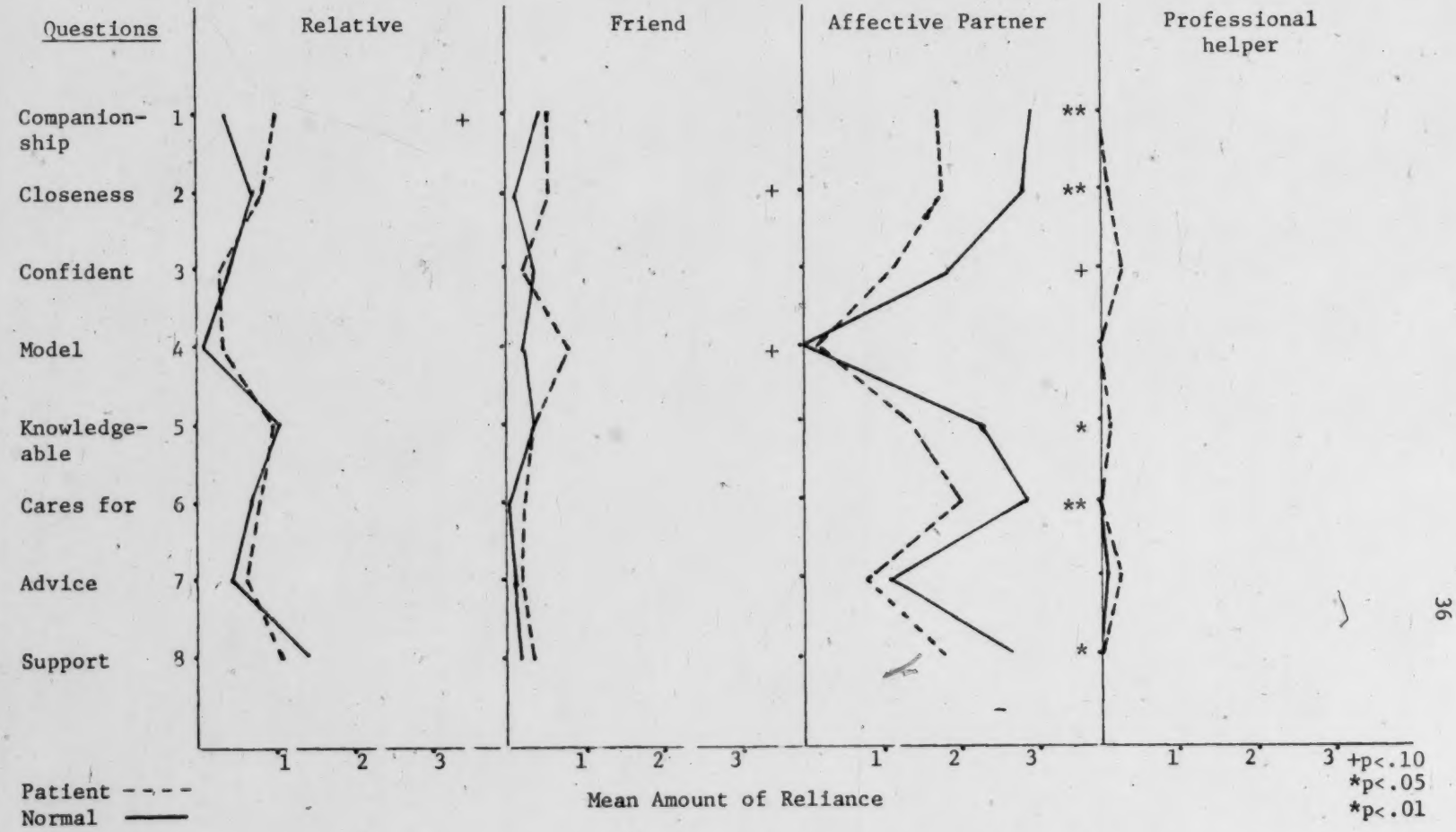
MEAN RELIANCE ON RELATIONSHIP CATEGORIES

FOR MARRIED PATIENTS AND NORMALS

	Patients	Normals	t	df	p<
Relative	6.48	5.65	.47	49	.638
Friend	3.52	2.00	1.15	49	.256
Affective Partner	10.96	16.54	3.23	49	.001
Professional Helper	.80	.11	1.91	49	.032

FIGURE 3

AMOUNT OF RELIANCE WITHIN RELATIONSHIP CATEGORIES FOR MARRIED PATIENTS AND NORMALS



Comparing across individual questions, Figure 3 reveals highly similar patterns of reliance upon relatives and friends between patient and normal samples, with a few exceptions. Patients tended to rely more upon relatives than did normals for companionship (Question 1, $t=1.68$; $df=49$; $p<.099$). They also tended to rely more upon friends for feelings of closeness and for models to guide their behavior (Questions 2, $t=1.81$; $df=49$; $p<.077$, and 4, $t=1.93$; $df=49$; $p<.059$; see Appendices C6 and C7 for further documentation).

As with the overall reliance scores the greatest differences existed in the spouse category. Patients were significantly less reliant upon their spouse than normals for companionship, feelings of closeness, feeling understood, feeling cared for and for social support (Questions 1, 2, 5, 6, and 8; see Table 6). Moreover, patients tended to be less reliant upon their spouse for someone to confide in when troubled. As Figure 3 indicates, the pattern of reliance upon a spouse was quite similar for patients and normals, however, in most cases reliance was greatly attenuated in the patient sample.

Professional helpers were relied upon for feelings of closeness, for someone to confide in when troubled, for understanding and for advice about how to live, by married patients (Questions 2, 3, 5, and 7, respectively; see Appendix C8 for mean reliance scores). These findings seem relatively characteristic of the therapeutic role. In comparison one normal reported relying upon a professional helper for advice about how to live (Question 7).

The question is, how are these findings to be understood? To begin with marriage itself would seem to indicate a relatively high degree of

TABLE 6

MEAN RELIANCE ON THE AFFECTIVE PARTNER OF

MARRIED PATIENTS AND NORMALS

Question	Patients	Normals	t	df	p<
1	1.72	2.96	3.88	49	.001
2	1.80	2.85	3.28	49	.002
3	1.16	1.85	1.71	49	.094
4	.24	.0			
5	1.44	2.31	2.19	49	.033
6	2.00	2.85	2.79	49	.007
7	.80	1.04	0.63	49	.530
8	1.80	2.69	2.60	49	.012

social skill. At the very least it indicates that the individual is capable of attracting others. The present findings indicate that while patients demonstrate attenuated reliance upon their spouse they showed a trend towards greater reliance upon friends (see Table 5). Increased reliance upon voluntary (friendship) relationships could be viewed as an indication of some social facility.

Perhaps married patients have the skills required to initiate relationships but lack the skills required to maintain and develop relationships especially those of a psychosexual nature. Their greatly reduced reliance upon their spouse and the fact that 16% of the patients did not report their spouse at all, would seem to indicate some problems with psychosexual relationships.

Summary

Married patients were less satisfied with their personal relationships in the month prior to testing in comparison with married normals of the same age and sex. While these groups did not differ significantly in the overall number of collaterals reported, patients tended to perceive social networks which contained fewer collaterals who provided social support and understanding, when compared with normals. In contrast, they report a larger number of collaterals who they wished they could emulate in comparison with normals.

In terms of reliance upon relationship categories married patients differed most from married normals in their attenuated reliance upon their spouse, and their greater reliance upon professional helpers. In addition, they showed a slight tendency to rely more upon friends than normals.

STUDY III

Method

Procedure

Forty patients and 32 normals who had never been married and were between the ages of 19 and 32 were drawn from the subject pool. Within the patient sample 16 subjects were admissions to Alberta Hospital Edmonton and 24 subjects were admissions to Day Hospital Edmonton. The normal sample included the 16 subjects used in Study I. Scoring and data analyses were identical with those used in the first study.

Results and Discussion

These two groups of single subjects did not differ significantly in age or sex. Mean ages were 24 years for single patients and 23 for single normals ($t=1.27$; $df=70$; $p<.205$). Approximately one half of each sample were female ($x^2=.20$; $df=1$; $p<.654$).

Missing Data

Two of the 32 normals and 9 of the 40 patients failed to complete the Social Information form. This difference was not significant ($x^2=2.48$; $df=1$; $p<.115$). Furthermore, these missing data did not appreciably affect the age and sex characteristics of either sample.

Treatment History

Of the patient sample 84% had been treated prior to admissions. In

comparison only 10% of the single normals had been treated for a psychological disorder. The difference was significant (x^2=29.56; df=1; p<.001).

Satisfaction

As predicted single patients were significantly less satisfied with their personal relationships in the month prior to testing than were normals of a similar age and sex. On the 4-point scale of satisfaction, normals obtained a mean score of 3.13 while patients obtained a mean score of 1.87 (t=5.76; df=59; p<.001).

Number of Collaterals

There was no significant difference between groups in the number of collaterals reported (means of 4.25 for patients and 4.52 for normals; t=.54; df=59; p<.594). The number of collaterals ranged from 1 to 10 for single normals and from 2 to 9 for patients. Professional helpers made up a mean of 16% of the collaterals reported by patients and only 1% for normals. This difference was significant (t=3.36; df=59; p<.001).

While there was no overall significant difference in the number of collaterals reported by single patients and normals these two groups tended to differ when comparisons were made on the number of collaterals reported per question. In comparison with normals, patients tended to report spending their free time with fewer collaterals (Question 1, t=1.99; df=59; p<.051). They also tended to report fewer collaterals who they felt close to and who they could rely upon for social support (Questions 2, t=1.88; df=59; p<.062; and 8, t=1.72; df=59; p<.087, respectively). On the other hand, they tended to report more collaterals

who they wished they could emulate (Question 4, t=1.65; df=59; p<.101; see Appendix C9 for further documentation). As with married patients, single patients tended to wish that they were more like others to a greater extent than normals.

Reliance on Relationship Categories

It had been hypothesized that single patients would rely more upon relatives and less upon voluntary relationships than normals. Only partial support was obtained for these hypotheses. While the mean reliance upon relatives and friends were in the predicted directions the differences were not statistically significant (see Table 7). However, patients were significantly less reliant upon affective partners than normals. Further analyses revealed that while 47% of the single normals reported a boyfriend or girlfriend only 25% of the patients reported such relationships. Although this difference was not significant it was in the same direction as that obtained with married subjects vis a vis their spouse (t=1.66; df=59; p<.102). Moreover, reliance upon those affective partners that were reported showed the same pattern as was exhibited by married subjects in their reliance upon their spouse. That is, patients relied significantly less upon the affective partners that they did report, than did normals (means of 4.92 and 10.29, respectively; t=2.24; df=16; p<.039). For both married and single subjects, then, the area of psychosexual relations seems particularly sensitive in discriminating between patients and normals.

Given the low percentage of patients who reported a boyfriend or girlfriend and the trend towards reduced reliance on friends in

TABLE 7

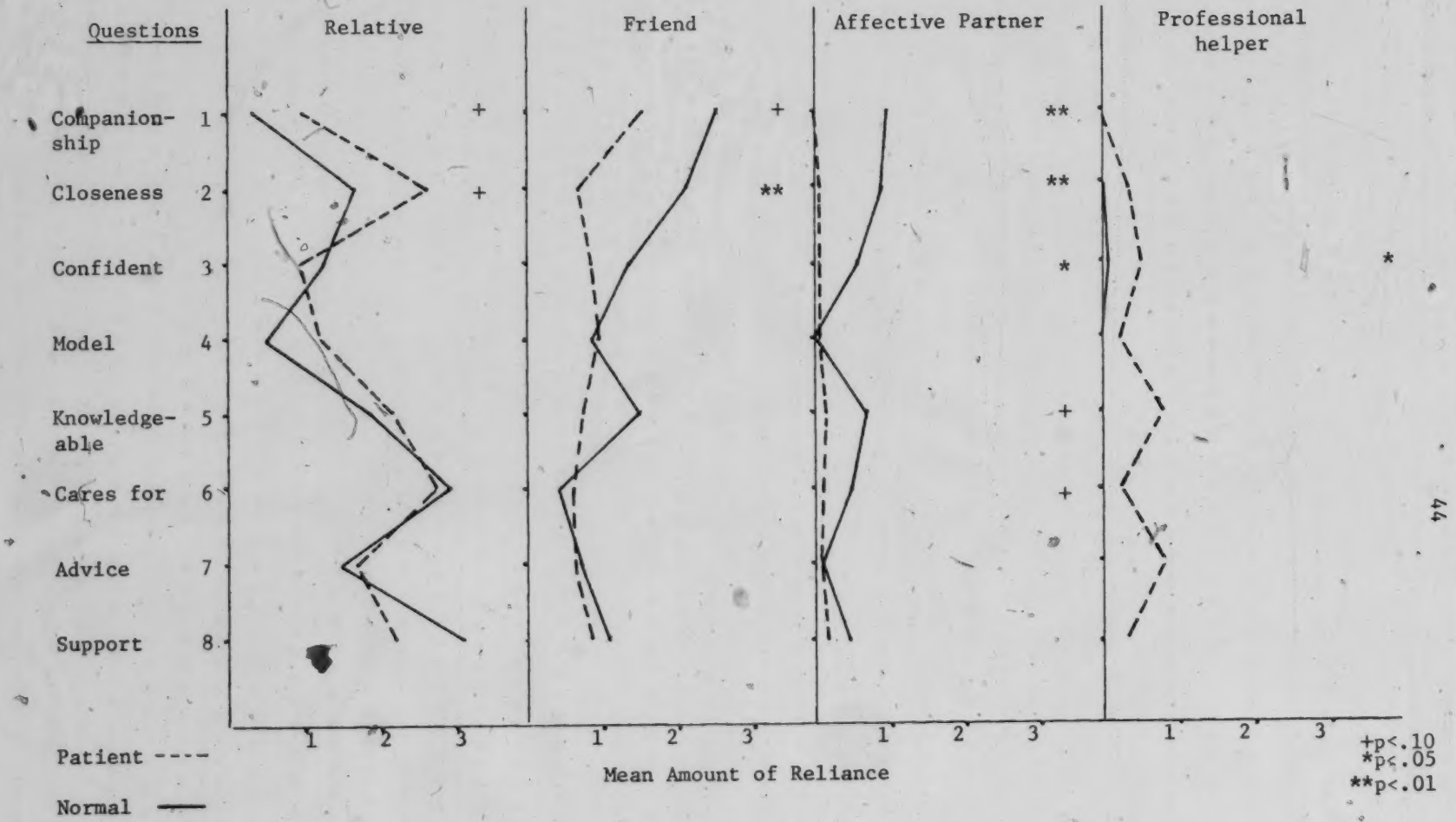
MEAN RELIANCE ON RELATIONSHIP CATEGORIES

FOR SINGLE PATIENTS AND NORMALS

	Patients	Normals	t	df	p <
Relative	15.03	13.43	.58	59	.283
Friend	7.35	10.67	1.36	59	.089
Affective Partner	1.00	4.57	2.77	59	.004
Professional Helper	3.58	.07	3.11	59	.002

FIGURE 4

AMOUNT OF RELIANCE WITHIN RELATIONSHIP CATEGORIES FOR SINGLE PATIENTS AND NORMALS



comparison with normal subjects, single patients would appear to have difficulty even initiating voluntary relationships let alone maintaining them.

Turning to the individual questions, Figure 4 reveals that patients tended to rely more heavily upon relatives than normals for companionship and feelings of closeness (Question 1, $t=1.84$; $df=59$; $p<.071$; and 2, $t=1.78$; $df=59$; $p<.081$, respectively). Furthermore, they tended to rely less upon friends for companionship and significantly less upon friends for feelings of closeness in comparison with normals (Questions 1, $t=1.63$; $df=59$; $p<.108$; $t=3.01$; $df=59$; $p<.004$, respectively; see Appendices C10 and C11 for further documentation).

In comparison with normals, single patients relied significantly less upon affective partners for companionship, feelings of closeness, for someone to confide in when troubled and for understanding (Questions 1, 2, 3 and 5, respectively; see Table 8). They also tended to rely less upon affective partners for feeling cared for (Question 6).

The trend towards greater reliance upon relatives and reduced reliance upon friends for companionship, within the single patient sample, is of particular interest in light of the work by Adams (1967). As was indicated in Study I single normals preferred to spend their free time with friends in comparison with relatives. It was hypothesized that if single patients lack the social skills required in attracting and maintaining friendships that they would be forced to rely upon relatives in order to meet these needs. In terms of companionship this appears to be the case.

As predicted, single patients were more reliant upon professional

TABLE 8

MEAN RELIANCE ON AFFECTIVE PARTNERS BY

SINGLE PATIENTS AND NORMALS

Question	Patient	Normal	t	df	p<
1	.0	1.03			
2	.10	.97	3.04	59	.004
3	.10	.67	2.22	59	.030
4	.10	.0			
5	.19	.70	1.98	59	.053
6	.16	.57	1.69	59	.096
7	.13	.13	.03	59	.976
8	.23	.50	1.15	59	.254

helpers than normals (see Table 7). In fact, patients relied upon professional helpers for all interpersonal needs sampled here except companionship (see Table 9). While one normal reported relying on a professional helper for someone to confide in when troubled this reliance was significantly lower than for that of patients.

Before turning to the comparison between married and single patients, a number of points need clarification. First, the results of the Study I revealed that the perceived social networks of married and single normals were quite different in terms of reliance upon relationship categories. Since comparisons on these measures were made between patients and normals in Studies II and III it seemed somewhat redundant to include these comparisons in Study IV. As a result, a restricted number of comparisons were made in the last study.

In the Study I married normals were more satisfied with their personal relationships than single normals. Subsequent comparisons revealed that married and single patients were less satisfied with their personal relationships than their normal counterparts. It is of interest, therefore, to determine whether the marital status difference in satisfaction holds for the patient samples or whether patient status and marital status interact to "wash out" this difference.

While patients did not differ significantly from normals in the overall number of collaterals that they reported, there was a tendency for married normals to report fewer collaterals than single normals. This may have been a consequence of the heavy reliance upon their spouse by married subjects. Again it is of interest to determine whether a similar trend appeared in the patient samples.

TABLE 9

MEAN RELIANCE ON PROFESSIONAL HELPERS

BY SINGLE PATIENTS AND NORMALS

Question	Patient	Normal	t	df	p<
1	.0	.0			
2	.35	.0			
3	.58	.07	2.11	59	.039
4	.29	.0			
5	.84	.0			
6	.29	.0			
7	.84	.0			
8	.39	.0			

The results of the second and third studies suggested that single patients relied more extensively upon professional helpers than married patients. While single patients report that professional helpers made up 16% of their collaterals, married patients reported only 6%. If it were assumed that marriage indicates a relatively higher level of interpersonal skill and that reliance upon professional helpers indicates poor social skills then these results would appear understandable. Study IV therefore included a comparison between single and married patients in terms of their reliance upon professional helpers.

Summary

Single patients were significantly less satisfied with their personal relationships in the month prior to testing than single normals of the same age and sex. While these groups did not differ significantly in the overall number of collaterals, single patients perceived social networks which contained fewer collaterals who provided companionship, feelings of closeness, and social support. On the other hand, patients tended to report a larger number of collaterals who they wished to emulate than did normals.

Both lack of reliance upon affective partners and substantial reliance upon professional helpers served to discriminate single patients from single normals. These patterns held across a number of interpersonal needs. In addition patients tended to show greater reliance upon relatives and reduced reliance upon friends for companionship and feelings of closeness in comparison with normals.

STUDY IV

Method

Procedure

Thirty-four single and 29 married patients between the ages of 23 and 49 years were drawn from the subject pool. Both of these samples overlapped considerably with patient samples used in Studies II and III.

Results and Discussion

These two groups did not differ significantly in age; means of 31 years for single patients and 35 years for married patients ($t=1.77$; $df=61$; $p<.083$). Furthermore, these groups did not differ significantly in terms of sex, with 41% of the single patients being female as compared with 62% of the married patients ($x^2=1.96$; $df=1$; $p<.161$).

Missing Data

Seven of the 34 single patients and 5 of the 29 married patients failed to complete the Social Information Form. This difference was not significant ($x^2=.00$; $df=1$; $p<.988$). Missing data in these samples did not appreciably affect their age and sex characteristics.

Satisfaction

Single patients did not differ significantly from married patients in their satisfaction with their personal relationships in the month

prior to testing (means of 2.11 and 2.52, respectively; t=1.32; df=47; p<.193), although the difference was in the same direction as that obtained for normals. With respect to satisfaction with personal relationships, marriage does not appear to afford any protection from dissatisfaction when the individual becomes a psychiatric patient.

Number of Collaterals

Single patients reported significantly more collaterals than married patients (means of 4.44 and 3.21, respectively; t=2.93; df=49; p<.005). This relationship also held when professional helpers were removed from this analysis (means of 4.00 and 3.00; t=2.28; df=49; p<.027).

Reliance on Professional Helpers

While single patients on the average relied upon professional helpers to some extent for all of the interpersonal needs sampled here, married patients relied upon professional helpers only for feelings of closeness, someone to confide in when troubled, understanding, and advice about how to live (Questions 2, 3, 5 and 7; see Table 10). However, despite the extensiveness of the single patients reliance upon professionals the overall measure of reliance fell short of statistical significance (see Table 10 for documentation).

Summary

Single and married patients did not differ significantly on their satisfaction with their personal relationships in the month prior to testing. Single patients reported a greater number of individuals who

they relied upon to meet a variety of interpersonal needs including and excluding professional helpers in comparison with married patients. While single patients relied upon professional helpers for a greater number of needs than married patients, they did not differ significantly from married patients on their overall reliance upon professional helpers.

TABLE 10

MEAN RELIANCE ON PROFESSIONAL HELPERS BY SINGLE AND MARRIED PATIENTS

Question	Single	Married	t	df	p<
1	.11	.0			
2	.19	.13	.26	49	.794
3	.44	.33	.37	49	.713
4	.11	.0			
5	.41	.13	1.03	49	.310
6	.11	.0			
7	.74	.25	1.58	49	.119
8	.11	.0			
Total	2.22	.83	1.45	49	.154

GENERAL DISCUSSION

The aim of this research was to measure and describe differences in the perceived social networks of psychiatric patients and normals, comparable in terms of age, sex, and marital status. Three main areas were examined: satisfaction with personal relationships, number of collaterals relied upon for a variety of interpersonal needs, and the relative amount of reliance upon categories of relationships.

The study was exploratory in nature since no previous attempts have been made to examine the social environments of psychiatric patients in the present manner. As a result a number of dependent measures were examined for which no hypotheses were presented. However, five hypotheses were examined and the results were generally supportive.

These hypotheses were based on the premise that deviant social behavior was a primary determinant of psychiatric hospitalization. This deviant social behavior was characterized as problems with interpersonal relationships which stemmed primarily from inadequate or maladaptive social skills. First it was argued that low patient satisfaction with personal relationships would be an index of problems with interpersonal relationships. Support was obtained for this hypothesis with both married and single patients. Unexpectedly, married normals were found to be more satisfied with their relationships than single normals. However, this marital status effect interacted with psychiatric status such that no comparable difference was found between married and single patients.

Second, it was argued that inadequate or maladaptive social skills would reduce reliance upon voluntary relationships among single patients in comparison with single normals. This hypothesis was restricted to single subjects since the baseline data indicated that on the present measures of the social network married subjects relied primarily upon their spouse. Partial support for this hypothesis was obtained in terms of single subjects' reliance upon friends and full support was obtained when reliance upon a boyfriend or girlfriend was examined. Further, support for the hypothesis that single patients encounter difficulty initiating and maintaining voluntary relationships arose from the fact that such patients reported fewer collaterals who they could rely on for companionship. In addition, single patients relied more on relatives and less on voluntary relationships for companionship than single normals. Adams (1967) argued that friends would be sought for companionship because of the consensual attributes of friendship and the obligatory attributes of kinship. Apparently single patients are unable to attract the companionship of friends and affective partners, but they are able to rely on relatives for companionship because of the obligatory nature of kinship. This same pattern of reliance was observed in terms of feelings of closeness. Single patients relied less on voluntary relationships and tended to rely more on relatives for emotional closeness.

This leads to the third hypothesis that single patients are more reliant upon relatives than single normals in an effort to meet their interpersonal needs not met by voluntary relationships. Partial support was obtained for this hypothesis. However, differences in the reliance upon relatives between patients and normals appeared to be

related to specific questions. Patients tended to rely more upon relatives for companionship and for feelings of closeness and less upon relatives for social support (see Figure 4). Thus, the effects tended to cancel each other out when the overall reliance upon relatives was calculated.

The fourth hypothesis concerned married subjects' reliance upon their spouse. On the basis of Crago's review (Crago, 1972) of pathology within marriage, it was argued that married patients would rely less upon their spouse than married normals. Strong support was obtained for this hypothesis. Since single patients also reported lower reliance upon a boyfriend or girlfriend than normals, it would appear that the area of psychosexual relations persents problems for both married and single patients. Plutchik (1971) has reported that patients comparable to those examined in this study are below average in showing affection to others and in trusting and accepting others. As these are qualities typically associated with psychosexual relations these two findings are congruent.

Fifth, it was hypothesized that patients rely more upon professional helpers than normals due to a lack of normalizing agents in their naturalistic social network. Support for this hypothesis was obtained with both married and single subjects. Furthermore, there was a trend for single patients to rely more upon professionals than married patients. While single patients relied on professionals for all of the needs sampled here (including companionship) married patients relied upon professionals for feelings of closeness, someone to confide in when troubled, understanding and for advice about how to live.

One possible explanation is that marriage itself indicates greater social skills than remaining single. If this is the case, married patients may have a lower need to rely upon professionals than single patients. It was suggested in Study II that married patients may have the social skills required to initiate relationships but fail to maintain and develop relationships, while single patients may even lack the skill required to initiate relationships. Some support for this notion regarding married patients' social skills arose from the trend of increased reliance upon voluntary relationships (friends) in comparison with normals to offset their reduced reliance upon their spouse. However, this can only be regarded as a weak explanation.

Three additional findings merit some scrutiny. First, both single and married patients tended to report more collaterals who they wished they were like, than normals. This was interpreted as a further indication of patients' dissatisfaction with their social behavior.

Second, both groups of patients reported fewer collaterals who they felt would stand by them through almost anything. It could be that patients, through their deviant behavior, have alienated others such that they can no longer rely on them for support. On the other hand, Plutchik's data indicates that patients are simply less trusting of others. At this point no clear interpretation can be presented.

Third, married patients reported relying on fewer collaterals than single patients for all of the interpersonal needs sampled here. A similar trend was observed in the normal sample, however it failed to prove significant. This may have fallen short of significance since the normal samples in the first study were approximately half the size

of the patient samples in Study IV. In general then, it would appear that on the present measure of the social network, married subjects report fewer collaterals than single subjects. Furthermore, this effect was relatively unrelated to psychiatric status. This finding seems readily explainable in terms of married subjects' generally high reliance upon their spouse in comparison with other individuals.

At this point it is necessary to strike a note of caution regarding interpretations based on the present findings. The data presented here reflect subjective perceptions of social networks. No attempts were made to verify whether the reported relationships did indeed exist. While this emphasis on subjective perceptions was expedient, it was particularly problematic with respect to the patient samples. Since patients are viewed as exhibiting problems with personal relationships, the credabilfty of their perceptions of their own social networks is somewhat reduced in comparison with that of normal subjects. For example, while patients may report individuals, who "would stand by them through almost anything", the present method fails to provide any verification of this claim. In short, no direct measures of the quality of the reported relationships has been included in this study.

Furthermore, certain assumptions were made when interpreting differences in the number of collaterals reported on a specific question. For example, while one subject may have reported three individuals with whom he felt emotionally close, a second subject may have only reported one individual. Objective judges could rate the single individual's relationship as indicating greater emotional closeness than either of the three relationships reported by the first subject. However, in the

present study relationships were given equal weighting. That is, when married patients reported fewer individuals who they felt they could rely on for almost anything, in comparison with married normals, this was interpreted as demonstrating that patients found their social network less supportive than normals. It could have been argued that patients enjoyed solid relationships with a limited number of individuals and therefore did not need to rely on a large number of individuals in order to meet that particular need. On the other hand, when patients reported a larger number of individuals who they wished they were like in comparison with normals, this was interpreted as indicating a greater need for reliance on models to guide their behavior. It could have been argued that the social networks of normals simply lacked those individuals who could serve as adequate models for their behavior. However, given the fact that normals reported greater satisfaction with their personal relationships in comparison with patients, the interpretations which were presented yielded high face validity.

The point is that the present findings are far from conclusive. However, they do indicate the potential usefulness of exploring patients' social networks. To begin with the present measures have been useful in discriminating between patients and normals, and are suggestive of potentially fruitful areas of research. For example, the areas of psychosexual relations, reliance upon professionals, and the numbers and characteristics of individuals relied upon for companionship and for models to guide one's behavior, deserve further attention.

In addition, information about the social networks of the patients may become useful in the future in discriminating between types of

psychiatric problems. That is, information about the patient's social network may be of diagnostic significance. Kanfer and Saslow (1965) have suggested a diagnostic classification system which would include just such information. Furthermore, monitoring changes in a patient's social network may be useful in determining the social impact of treatment; both during the time when the patient is receiving treatment and following termination of treatment.

Clearly, the present piece of research is only the beginning. Many of the findings reported here were not particularly new or surprising. However, the present method offers a way of quantifying characteristics of patients' perceived social networks. In order to more fully delineate the characteristics of perceived social networks in relation to psychopathology the present measures need to be related to standard psychological measures as well as therapeutic outcome. Such analysis is currently underway.

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APPENDIX A

1. Who do you spend most of your free time with?
   1. _____
   2. _____
   3. _____
2. Who do you feel the closest to?
   1. _____
   2. _____
   3. _____
3. When you feel unhappy or confused who do you talk to?
   1. _____
   2. _____
   3. _____
4. Of the people you know personally, who do you wish you were most like?
   1. _____
   2. _____
   3. _____
5. Who knows the most about you?
   1. _____
   2. _____
   3. _____
6. Who cares the most about you?
   1. _____
   2. _____
   3. _____

7. Whose advice about how to live is most important to you?

   1. _____

   2. _____

   3. _____

8. Who would stand by you through almost anything?

   1. _____

   2. _____

   3. _____

9. On the whole how satisfied have you been with your personal relationships during the last month?

   1. very satisfied

   2. often satisfied

   3. often dissatisfied

   4. very dissatisfied

APPENDIX B

SOCIAL INFORMATION FORM

Please answer the following questions about your adult (16 and over) friends and relatives. The questions are not easy to answer but they are important. As we do not want to invade upon your privacy please use first names only, except where two or more people have the same name. In that case use another initial or the first letter of their last name to indicate who they are. This information is CONFIDENTIAL.

Please answer questions 1 through 8 by placing the names of those adults for whom the questions apply on the lines below each question. Place the name of your first choice on the first line, your second choice on the second line and your third choice on the third line. However, you do not have to indicate 3 choices for each question. For example, on the first question if you prefer to spend your free time alone, put "alone" or "no one" on the first line and leave the other lines blank. If on another question only one person fits the bill then leave the second and third lines blank.

Do not refer to groups of people as a unit. For example, do not write "my parents" on one line, but rather refer to them as separate individuals and place their names on separate lines.

The questionnaire asks only for the names of those adult persons who are presently alive who you know personally. Thank you.

APPENDIX C1

MEAN NUMBER OF COLLATERALS REPORTED BY MARRIED AND SINGLE NORMAL CONTROL SUBJECTS

Question	Single	Married	t	df	p<
1	1.56	1.54	.06	27	.953
2	1.94	1.38	1.72	27	.097
3	1.19	1.46	.86	27	.397
4	.81	.31	1.35	27	.189
5	1.63	1.69	.16	27	.871
6	1.38	1.54	.44	27	.665
7	1.00	.78	.60	27	.551
8	1.75	1.92	.54	27	.594

APPENDIX C2

MEAN RELIANCE ON THE RELATIVE CATEGORY OF RELATIONSHIPS

FOR MARRIED AND SINGLE NORMALS

Question	Single	Married	t	df	p<
1	.56	.31	.74	27	.463
2	1.75	.38	2.24	27	.034
3	1.13	.54	.94	27	.354
4	.63	.23	.87	27	.394
5	1.81	1.23	.82	27	.418
6	2.63	.84	3.01	27	.022
7	1.19	.23	1.61	27	.120
8	2.94	1.38	2.36	27	.026

APPENDIX C3

MEAN RELIANCE ON THE FRIEND CATEGORY OF RELATIONSHIPS

FOR MARRIED AND SINGLE NORMALS

Question	Single	Married	t	df	p<
1	2.44	.62	2.34	27	.027
2	2.31	.31	3.33	27	.003
3	1.56	.31	2.45	27	.021
4	1.31	.46	1.27	27	.214
5	1.44	.62	1.26	27	.220
6	.56	.15	1.12	27	.271
7	.94	.23	1.28	27	.212
8	1.13	.38	1.32	27	.198

APPENDIX C4

MEAN RELIANCE SCORE, SUMMED ACROSS RELATIONSHIP CATEGORIES,

FOR MARRIED AND SINGLE NORMALS

Question	Single	Married	t	df	p<
1	3.50	3.92	.54	27	.597
2	4.44	3.69	1.33	27	.194
3	3.06	3.69	.91	27	.373
4	1.94	.69	1.53	27	.137
5	3.56	4.15	.77	27	.451
6	3.38	3.77	.55	27	.588
7	2.31	1.92	.45	27	.658
8	4.25	4.54	.52	27	.609

APPENDIX C5

MEAN NUMBER OF COLLATERALS REPORTED BY

MARRIED PATIENTS AND NORMALS

Question	Patients	Normals	t	df	p<
1	1.40	1.54	.56	49	.579
2	1.40	1.46	.28	49	.689
3	.80	1.15	1.41	49	.162
4	.52	.15	2.18	49	.034
5	1.04	1.46	1.94	49	.055
6	1.32	1.46	.55	49	.589
7	.72	.69	.14	49	.619
8	1.28	1.73	1.73	49	.089

APPENDIX C6

MEAN RELIANCE ON THE RELATIVE CATEGORY OF RELATIONSHIP

FOR MARRIED PATIENTS AND NORMALS

Question	Patient	Normals	t	df	p<
1	1.04	.38	1.68	49	.099
2	.92	.85	.17	49	.868
3	.44	.62	.56	49	.581
4	.44	.12	1.37	49	.175
5	1.00	1.08	.18	49	.861
6	.88	.81	.19	49	.850
7	.72	.50	.61	49	.545
8	1.04	1.31	.64	49	.524

APPENDIX C7

MEAN RELIANCE ON THE FRIEND CATEGORY OF RELATIONSHIP

FOR MARRIED PATIENTS AND NORMALS

Question	Patient	Normals	t	df	p<
1	.64	.54	.27	49	.786
2	.68	.15	1.81	49	.077
3	.24	.38	.58	49	.564
4	.84	.23	1.93	49	.059
5	.32	.31	.05	49	.959
6	.24	.08	.90	49	.371
7	.24	.12	.68	49	.502
8	.32	.19	.57	49	.572

APPENDIX C8

MEAN RELIANCE ON THE PROFESSIONAL HELPER CATEGORY OF RELATIONSHIPS FOR MARRIED PATIENTS AND NORMALS

Question	Patients	Normals	t	df	p<
1	.0	.0			
2	.12	.0			
3	.32	.0			
4	.0	.0			
5	.12	.0			
6	.0	.0			
7	.24	.12	.62	49	.279
8	.0	.0			

APPENDIX C9

MEAN NUMBER OF COLLATERALS REPORTED BY

SINGLE PATIENTS AND NORMALS

Question	Patients	Normals	t	df	p<
1	1.16	1.73	1.99	59	.51
2	1.68	2.17	1.88	59	.062
3	1.10	1.43	1.28	59	.202
4	1.00	.60	1.65	59	.101
5	1.71	1.83	.49	59	.624
6	1.55	1.63	.39	59	.671
7	1.42	1.03	1.42	59	.157
8	1.58	2.00	1.72	59	.087

APPENDIX C10

MEAN RELIANCE ON THE RELATIVE CATEGORY OF RELATIONSHIPS FOR SINGLE PATIENTS AND NORMALS

Question	Patient	Normals	t	df	p<
1	1.03	.33	1.84	59	.071
2	2.71	1.70	1.78	59	.081
3	1.00	1.30	.65	59	.519
4	1.23	.63	1.46	59	.150
5	2.23	1.90	.60	59	.553
6	2.81	2.93	.24	59	.810
7	1.74	1.53	.39	59	.701
8	2.29	3.10	1.48	59	.144

APPENDIX C11

MEAN RELIANCE ON THE FRIEND CATEGORY OF RELATIONSHIPS

FOR SINGLE PATIENTS AND NORMALS

Question	Patient	Normals	t	df	p<
1	1.65	2.57	1.63	59	.108
2	.77	2.13	3.01	59	.004
3	.90	1.40	1.18	59	.243
4	.94	.90	.08	59	.940
5	.84	1.50	1.39	59	.170
6	.61	.43	.51	59	.611
7	.77	.70	.19	59	.853
8	.87	1.03	.36	59	.718